The following report describes workplace fatalities. This information is provided for instructional purposes for study and to apply to your own workplace practices. Victims can be your friends, neighbors, co-workers, or loved ones.

The fatalities listed include only a portion of the total incidents reported, and many times co-workers are left with questions of how situations could have been prevented.

Please read the following review with prevention in mind. Most, if not all, accidents and fatalities are preventable through adherence to careful planning, application of engineering controls, and approved work practices. As you study the questions after the review, note they describe components of basic safety and health practices. This material may be copied, discussed, shared, and most of all remembered.

If you are a worker, an employer, a family member, or friend of a worker, and are concerned about possible unsafe work practices, call your local office of the Department of Labor and Industries and ask to speak to a safety and health professional. You can also report fatalities and get other WISHA information by calling 1-800-4-BE-SAFE (1-800-423-7233).

02/16/03

A 20-year old employee of a crane rental company was fatally injured when a 225-pound headache ball fell 15 feet striking the victim in the upper left chest.

The victim was in the process of loading rigging equipment in the back of a pickup truck with the assistance of an operating engineer and a hydraulic mobile crane. In order to reach the back of the pickup truck, the operator began to extend (telescope out) the boom, while the victim was holing on to a lifting chain suspended from the main hook. While extending the boom, the auxiliary hook (whipline) became two-blocked (a condition in which the lower hook assembly comes in contact with the boom point sheave assembly) parting the line and causing the headache ball to fall striking the victim.

The wheel mounted boom crane is a 1974 Grove RT-65S, and owned by the company. The ball fell from the boom, which was approximately 15 feet up while it was being telescoped out. The crane had an aftermarket Greer BB-550 radio operated anti-two-block alarm system and five hydraulic cutouts kit installed that worked in conjunction with the anti-two block system. The crane's radio anti-two-block alarm system was inoperative and not tested just prior to the pick. The radio type system versus a hard wired system is not a fail-safe system. The crane operator was not trained on how to test the system and it's inherent design limitations. The operator stated that he did not rely on anti-two block systems and was momentarily distracted from "the big picture" by focusing on the victim's activities.

In post inspection, the Anti-two-block's system sensors, receiver and hydraulic cutouts were functioning properly, however the transmitter had internal damage, which prevented it from transmitting a two-block condition to the receiver. Both the receiver test and transmitter test passed, but according to the manufacturer, does not mean that the transmitter will actually

transmit. The only way this system can check for proper operation is to manually two block the system prior to use.

Causes/Probable Causes

1. The Anti-two-block device did not function properly.
2. Radio anti-two block alarm system not properly tested, inspected, or maintained.
3. Operators not trained on the Greer Radio anti-two block system per manufacturer's directions.
4. Poor crane maintenance and inspection history.

Recommendations

1. Maintenance personnel and crane operators must be trained in the proper operation of safety devices

   WAC 296-800-14020 Develop, supervise, implement, and enforce safety and health training programs that are effective in practice
   You must:
   - Develop, supervise, implement, and enforce training programs to improve the skill, awareness, and competency of all your employees in the field of occupational safety and health.
   - Make sure training includes on-the-job instruction to employees prior to their job assignment about hazards such as:
     - Safe use of powered materials-handling equipment such as forklifts, backhoes, etc.
     - Safe use of machine tool operations
     - Use of toxic materials
     - Operation of utility systems
2. Employers must ensure that any unsafe condition found during inspection must be corrected before operation of the crane is resumed.

   WAC 296-24-24011 Maintenance procedure.
   (1) Any unsafe conditions disclosed by the inspection requirements of this section shall be corrected before operation of the crane is resumed. Adjustments and repairs shall be done only by designated personnel.

01/28/04

On January 28, 2004 at approximately 5:00 p.m., a 42-year-old forklift operator was killed when the forklift he was using went off the edge (side) of a loading dock ramp.

The victim was experienced having worked for his employer as a forklift operator for about 13 years. The forklift was an electric three-wheeled model and was being used on a wood loading dock ramp that was 11 feet 4 inches in length and 13 feet 1 inch wide. The ramp was on a 6-degree slope, exposed to the weather with snow present.

The victim was loading a railcar that was not positioned properly to the dock plate to allow the forklift operator to load the railcar without getting near the edge of the loading dock. When the victim tried to reposition the forklift into a new position to side shift the pallet he had just put in the railroad car into place, the tires on the right side of the forklift went off the edge on the north side of the loading ramp. No shear rail was provided on the side of the loading ramp. The forklift tipped off the ramp unto its right side ejecting the victim forward and to the right causing him to be caught between the mast and the

roll cage where he died of asphyxia. The victim was not wearing the seat belt that was provided on the forklift.

Requirement/Recommendations

- The employee was not wearing a seat belt while operating the forklift. Seatbelts (restraint devices) are required to be worn when provided. WAC 296-24-23027(15)
- Sufficient safe clearances shall be allowed at loading docks and kept clear. WAC 296-24-21501
- No shear rail was present on the side of the ramp.

01/02/04

On January 2, 2004 at approximately 9:30 a.m. a 38-year-old paper machine crewmember was killed when the cut-off knife for the winder was activated before the crewmember had cleared away from the knife blade.

After the paper sheet broke and wrapped around the drive drums, the victim and the 2 other crewmembers entered the machine to remove the excess paper from the drums and other areas within the winder. The knife blade was moved into the "maintenance" position and the operator then removed the interchangable key. The machine had not been turned off. The key for operation of the knife blade was placed in the pocket of the operator. Later, the operator reinserted the key and started moving the knife blade from the maintenance position to the running position without checking to ensure the machine area was clear. One employee was trapped between the cutoff knife and a drive roll. The victim sustained severe puncture wounds and lacerations.

All employees had received basic lockout/tagout training on the LOTO program. A partial energy control procedure had been developed for the task. The procedure did not address all of the sources of hazardous energy and methods necessary to isolate them. The procedure did require a group LOTO and usage of safety pins on the knife blade to prevent it from moving while an employee was in the hazardous area. Although the procedure had been developed and posted, the crew did not recall being trained on the procedure. Not all of the energy in the area is controled by the single key used to turn off the cut-off knife.

Requirement/Recommendations

- All hazardous energy sources associated with the equipment to be locked out must be addressed in a procedure that clearly and specifically outlines scope, purpose, authorization, rules and techniques. WAC 296-24-11005(4)(b)

- A key that is interchangeable with other equipment in the area cannot be used as a lockout device. WAC 296-24-11005(5)(b)(iii)

- Prior to starting work on machines or equipment that have been locked out or tagged our, the authorized employee shall verify that isolations and deenergization of the machine or equipment have been accomplished. WAC 296-11007(4)

- Each employer shall conduct a periodic inspection to the energy control procedure at east annually to ensure that the procedure and the requirements of this standard are being followed. WAC 296-24-1105(6)(a)

- The employer shall provide training to ensure that the purpose and function of the energy control program are understood by employees. WAC 296-24-11005(7)

- Whenever there is a change, or a periodic inspect reveals deviations or lack of proficiency retraining must take place. WAC 296-24-11005(7)(c)

- Management must establish, supervise and enforce the safety procedures in a manner that is effective in practice. WAC-296-800-14025

9/2/2003 Tank Explosion

On September 2, 2003 at approximately 6:30 pm, a 42-year-old worker was killed while grinding on a steel tank. The victim was a technician working for a fuel tank repair company and had been with the employer repairing tanks for several years.

The victim had been working on this project for a few days by himself with occasional assistance from one other person. He was working alone inside a 5'wide by 5' long by 4'3" deep excavation on the outside of a 12,000-gallon underground fuel storage tank at a public gas station. A 17" by 17 " entrance hole had been cut into the tank to allow access to the interior. The fuel tank had been emptied and the sludge at the bottom of the tank removed. Forced air ventilation had been used inside the tank while holes were repaired. The atmosphere was monitored for flammable vapors.

The storage tank was one of a series of tanks connected by a secondary ventilation line with four ventilation risers. The employer stated he had observed the four risers but assumed that each tank was individually ventilated but in fact they were not. Not knowing they were connected, the victim did not isolate the tank being repaired. Without isolating this tank from the secondary ventilation system, flammable vapors could be transferred from the other tanks with fuel, to the tank being repaired.

The victim was near completion of the project and had removed the forced air ventilation equipment. He was inside the excavation near the entrance to the tank using a hand held electric grinder to smooth metal by the entry hole. Witness close by heard a loud explosion and saw the victim-ejected approximately 30 feet into the air and landing about 70 feet away from the excavation.

Recommendations

- Obtain a diagram of the tank and related plumbing before work is started. These are available through the Washington State Department of Ecology and some local fire departments.
- Continue the use of forced-air ventilation during the entire project.
- Isolate the fuel tank being repaired from the other fuel tanks. When there is a risk of a secondary energy source an employer is required to have a hazardous energy control program. Isolation from the secondary ventilation system should have prevented flammable vapors from entering the tank.

WAC 296-24-11005 General Energy control program. The employer shall establish a written program consisting of an energy control procedure, employee training and periodic inspections to ensure that before any employee performs any servicing or

maintenance on a machine or equipment where the unexpected energizing, start up, or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source, and rendered inoperative.

10/24/01 Fall from Roof
A 61-year old construction supervisor was fatally injured when he fell from a roof. The victim was an experienced construction worker who had worked for his employer for about two years. On the day of the accident the victim started work on the roof before the work crew arrived. The victim was working at or near the edge of the roof, approximately 17 feet from the ground, and he was not wearing fall protection equipment. The victim either slipped off, or tripped over tools on the roof, and fell over the edge, landing head first on the concrete below.

As there were no witnesses, the exact cause cannot be determined. Some clues are as follows: The victim was 9' 6" from the base of the ladder, with his head closest to the ladder. His back was against the house wall. The homeowner also heard two thumps on the roof, before his wife saw the victim pass her window. Due to the location, and the thumping noise, he was probably on the roof when he fell. The air nailer was found on top of him. Probable causes are:

1. He tripped on the air hose and fell off the roof.
2. He tripped on the roofing, and fell off the roof.
3. Less likely, he fell accessing or leaving the ladder.

- Are your employees working at heights of ten (10) foot or higher?
- Do you have fall protection equipment available?
- Are your employees trained and competent in the use of the fall protection equipment?
- Do you require and enforce the use of fall protection equipment?
- Are you and your employees familiar with the requirements of Part C-1 Fall Restraint and Fall Arrest WAC 296-155-245.
- Do you develop a Fall Protection Work Plan for all jobs where employees are exposed to a fall hazard of 10 feet or more?
- Does your ladder use follow the requirements of Part J, Stairways and Ladders WAC 296-155-480?
- Have you provided training to your employees in the safe use of ladders?

7/6/01 Ironworker Falls
An apprentice ironworker was killed when she fell through an unprotected vent shaft. The 38-year-old victim was near the end of her 3-year apprenticeship program and had worked at this construction site for a few months. The construction site was a large multi-story building that had several subcontractors working at the time.

The victim was working alone on the 3rd level of the building preparing to weld. She was positioning her equipment between 2 walls built around the vent opening. Workers had built a cover for the 4-foot by 9 foot vent opening but that cover had been removed and never replaced a few days earlier by workers from a different subcontractor.

The victim stepped back and fell through the opening landing 30 feet below onto a concrete floor. Another worker who just happened to walk through the area found her sometime later.

- Do you conduct weekly walk-around safety inspections (more frequently when needed)?
- Do you react quickly to correct hazards identified in the inspections?
- Are subcontractors made aware of their responsibility for the safety of all workers on the site?
- Are all floor openings and stairwell protected by guardrails, safety nets or covers?
- Do all workers on the site know how to report unsafe conditions?

7/5/01 Machine Operator Crushed
A machine operator was killed when he lost control of the asphalt roller he was operating.

The 54-year-old victim was dispatched from the union hall that day and had been operating the equipment for approximately 3 hours. The victim had worked as an operating engineer for the past 6 years through the local union.

The victim was operating a 9-wheel asphalt roller, which is used to compact asphalt on a roadway. The 60,000-pound machine was working on a road with a 4% grade. The roller was equipped with rollover protection and the seatbelt was found to be in good operating condition.

The engine stalled on the asphalt roller causing a loss of hydraulics'. The machine rolled backward (free wheeling) gaining speed estimated to be about 20 mph. The machine traveled about ¼ of a mile before it left the road hitting a light pole and the embankment and rolling completely over finally stopping, resting on its' side. The operator was ejected and crushed when the machined rolled over him.

The investigation is in the preliminary stage. The following are some of the facts that are known.

1. The seatbelt was found unbuckled. It is not known if the operator had been wearing it and had unbuckled in an attempt to escape the moving machine.
2. The asphalt roller was found in the high gear/run mode. The manufacturer's recommendation for operation on a grade is low gear mode.
3. The emergency brake showed no evidence of being used.

    - Do you provide a worksite orientation for new employees?
    - Are your operators required to use seatbelts?
    - Are your employees aware of the potential consequences when a seatbelt is not worn when operating equipment with roll over protection?
    - Are your workers trained in the use of the equipment they will operate, including the differences between similar machinery?
    - Do your workers operate equipment in accordance with manufactures specifications?

- Are ground personnel (other than the operator) trained on the hazards of working around machinery?

5/1/01 Struck By Rotating Part

A 40-year-old, father of three, was killed when the chuck (which is a set of jaws with teeth that holds material on metal lathe) struck him. The victim was an experienced machinist, and had been working for the employer for approximately seven months.

The Ameri-Tech Lathe he was operating was equipped with a lathe chuck shield that covers the rotating chuck, and the metal part, and is intended to keep the operator away from the rotating parts. The victim had moved the shield (chuck guard) to the upright position, exposing himself to the rotating chuck and part.

The chuck was rotating at 630 rpm. The teeth of the chuck caught the glove worn by the victim, and pulled him into the lathe. He was struck on the side of the head and fatally injured. The victim died three days later.

Does your company ensure that machine guards are in place, and that workers use them when operating or working around machines?

WAC 296-24-15001(3)(b) Requires that "the point of operation of machines whose operation exposes an employee to injury, shall be guarded."

4/12/01 Fall From Elevation

A 24-year-old, father of two, was killed when the utility pole he was working on collapsed.

The victim was part of a two-person crew climbing and removing unused cable wire from wooden utility poles. Both the victim and his coworker had worked for their employer as ground personnel for a few years, however, only recently (approximately two months) started climbing utility poles.

The victim and coworker had been working all morning removing cable wire. This work required the workers to climb the wooden pole and disconnect the cable wiring. The two workers had completed work on three utility poles and stopped to have lunch with the victim's family. After lunch, the victim climbed the fourth utility pole to disconnect the wiring. The victim was working at the 13-foot level on a 20 feet tall utility pole. The pole had been in the ground for decades, and was rotten at the base. The two workers had a boom truck with a clamping attachment that could have been used to stabilize the pole, however, they chose not to use it. The victim had just disconnected the cable wiring from the pole when it broke in two at ground level. The pole, with the victim holding on, fell backwards onto the roadway crushing him.

The incident is still currently under investigation.

Do you have procedures in place to inspect utility poles before they are climbed?

WAC 296-32-330 Overhead lines (Telecommunications) describes under what conditions wood poles need to be tested and the method for testing.

WAC 296-45-385 Overhead lines (High voltage electrical) requires that wood poles be inspected and provides an appendix) methods of inspection and testing wood poles, as guidance for employers.

3/22/01 Crushed

A worker was killed when caught between the mast of a forklift and the load it was carrying.

The victim was assisting the forklift operator in moving a 5000 pound piece of equipment, with a 7-foot radius, to the outside of the building. The victim had placed blocks on the ground, and the equipment was placed onto the blocks. The chains that

connected the equipment to the forks were removed, and the lift truck operator began to back away from the load. As the operator moved backwards, the forks of lift truck caught the load, and the machine started to rock. The victim attempted to steady the equipment, when it tipped, pinning him against the mast.
Do you train lift truck operators? Do you provide training for employees working around equipment? WAC 296-24-23025 Operator Training.

3/21/01 Crushed
A 35-year-old paving crew worker was killed when caught between a trailer and a piece of equipment. The victim was working between a CMI asphalt machine, (which is about 60 feet long), and a dump truck with a trailer. He was a member of a three-person crew working as spotters for the machine.
The crew was removing two inches of asphalt from the road surface. The victim was walking between the machine and the dump, when the operator of the asphalt machine did not see that the victim had moved. The victim also did not tell the operator that he had moved. The asphalt machine came in contact with the trailer of the truck and crushed the worker.
Do your equipment operators, truck drivers and ground personnel maintain contact with each other?
Do you have a site plan (foot and vehicle traffic), and is it communicated to all workers?
Are your workers wearing high visibility clothing (vests, pants, etc.)?

12/21/00 Fall From Elevation
A 48-year-old tree trimmer was killed when he fell out of the aerial lift he was working in. The victim, co-owner of the tree timing company, was working in an aerial lift, while trimming a tree. He was wearing a body belt that had the chain saw attached, however, he was not tied off to the lift. The bucket type aerial lift did not have guardrails, and required the use of a safety harness. The victim was cutting and limb that fell and caught his chain saw and pulled him out of the basket. He was pronounced dead at the scene.
Do you require using of fall-protected equipment when needed?
Are all operators trained in the use of powered platforms that they are required to use?
WAC 296-24 Part J-3 (General Industry) WAC 296-155 Part J-1 (Construction).

12/19/00 Fall From Elevation
A 32-year-old construction worker was killed when he stepped into an unprotected floor opening, and fell 10 feet to the concrete basement floor below.
The Construction Company was building chicken pens at a farm in Eastern Washington. The victim had been working for the Construction Company for about one week. He and other workers were setting up chicken pens on the first floor of a building, which is about 10.5 feet above the basement floor. The victim was walking on the first floor and fell through a 36" x 42" opening to the cement floor below.
The victim sustained severe head injuries and was transported to the Hospital. He died four days later from these with severe head injuries.
Are all floor, wall and stairway openings protected from accidental falls?
Are regular inspections of the construction site made and hazards corrected?
WAC 296-155 Part K (Construction) 296-24 Part J-1 (General Industry).

11/9/00 Crushed
A 39-year-old worker was killed while working on a piece of wood working equipment. The victim was employed as a sawyer for an office furniture manufacturer. He had worked for this employer for over two years.

The victim was doing routine (monthly) maintenance on a computer-operated panel saw without turning the saw off. He was underneath the cutting table, manually cleaning the track for the carriage for the motor and blade, when he apparently contacted the bar in front of the machine, and activated the carriage.
The victim's head was crushed between the motor on the carriage and one of the legs of the table. There were no witnesses, however, the machine was still running when employees arrived.
Do you have an energy control program (Lockout/Tag out)?
Do you require its' use when performing maintenance on equipment?Are all affected and authorized workers trained in the energy control program?
See Part A-4 Safety Procedures, WAC 296-24-110 for specific requirements.Do you have training programs to improve the skill and competency of employees in the field of safety and health?
See WAC 296-24-020.

10/5/00 Entangled
A 31-year-old, mother of three small children, was killed when she became entangled in a machine. The victim was a co-lead worker for a crew of 12 people in a paper recycling operation. She had worked for her employer for about four months operating a conveyor. The crew had just started work for the day, and begun to load paper on a 50-foot conveyor belt. The paper traveled along the conveyor, on a landing where workers hand-remove contaminates, and then on to a machine that sorts the paper.
The victim had received some training in lockout/tag out procedures (the control of hazardous energy), and was in control of the conveyor. The paper-sorting machine was in control of a different operator, who had the additional duties of operating a forklift truck. Both the conveyor and the paper sorter could be locked out.
The victim had stopped the conveyor and climbed onto the paper-sorting machine. The operator of the sorting machine was unaware that the victim was on top of the machine and turned it on, crushing her.
Employers are required to have an energy control program if they have machinery that requires servicing and maintenance in which the unexpected energization or start up or release of stored energy could cause injury. (See WAC 296-24-110 part A-4 for more information).

9/29/00 Struck by Tree
A 21-year-old logger was killed when a tree fell on his skidder.
The victim was part of a three-person crew working for a small logging company that was removing trees for a private landowner. The accident occurred toward the end of the day, close to quitting time. The victim was returning to the logging area from the landing when he got to close the falling area. The cutters did not see him, and fell a tree across the cab of the skidder, crushing the victim.
Ensure the falling area is safe to enter. Stop your vehicle and observe the work area. Remain 2 tree lengths from the falling area until the fallers have acknowledged that the area is safe to enter. Establish and maintain communications between the fallers and all other members of the operation.

9/1/00 Forklift Rollover
A 21-year-old worker, and nephew of the business owner, was killed when the lift truck (powered industrial truck) he was operating, tipped over.
The victim was using a borrowed lift truck to place tarps on top of a load on a truck. The victim was either in route to obtain more tarps, or was on his way back with more tarps.

The victim was traveling with the forks fully raised to approximately 12 feet, which changed the center of gravity on the lift truck to tip. When he turned a corner, the top-heavy lift truck started turned over. The victim tried to jump free, but was crushed when the forklift landed on him. The victim was not wearing operator restraints (seatbelts, lap belts, etc.), and the victim had not been trained and evaluated in the use of this lift truck.
In March of the same year, the safety and health standards that govern the use of powered industrial trucks in general industry (WAC 296-24-230) changed. Specific training elements and a requirement for the evaluation of the operator performance in the work place were included in the standard (WAC 296-24-23025). Additionally, a requirement for the use of an active operator protection restraint device such as seatbelts and lap bar (WAC 296-24-23027(15)) was written into the standard.
Do you train and evaluate all lift truck operators in accordance with the standards?
Do you require your operators to wear seatbelts or other types of restraints while operating the lift trucks?
The 2000 standards for Forklifts/Powered Industrial Trucks can be accessed here.
An Online Presentation on Forklifts and Other Powered Industrial Trucks can be accessed here.

5/7/00 Cave-In
A 53-year-old backhoe operator was killed, and his son seriously injured, when the wall of a trench they were working on caved in.
The victims' were part of a four-person crew that was installing drainpipe in a trench measuring about16 feet deep, 15 wide and 60 feet long. The trench was not sloped, shored, or shielded. The spoils pile was positioned directly at the edge of the trench. Access to and from the bottom of the trench was a sloped section that formed a ramp, and was located at the opposite end (approximately 60 feet) from where the workers were stationed. The soil was heavy, dense clay, which contained some moisture. Tree planting had previously disturbed the soil.The son was at the bottom of the trench when the side caved in, trapping and injuring him. The backhoe operator and the project superintendent jumped into the trench to rescue the injured worker when a second cave in occurred killing the backhoe operator.
Do you provided the appropriate type protective system for all trenches?
Do you have a competent person (One who can identify hazards and has the authority to take prompt corrective measures) on the job site?
Do you have an emergency plan in place? Are your employees trained in this plan?
Have you provided an appropriate method of egress?
Are trenching hazards covered in your accident prevention plan?The specific section of the safety and health standards governing trenches can be found in WAC 296-155 Part N Excavation, Trenching, and Shoring.

2/22/00 Run Over
A 41-year old worker was killed, when a car struck him while he was flagging traffic. The victim was part of a road crew that was replacing a sign on the side of a road. The work site was located on a wide curve on a county road. The work to the sign was being performed on the side of the road.
The crew had placed three caution signs (Construction Ahead, Flagger, and One Lane Ahead), indicating roadwork was in progress, in addition to, two trucks with flashing beacons. The crew, including the victim, was wearing high visibility clothing. The victim was standing to the right of the fog line controlling traffic, when a vehicle struck him from behind. The driver of the vehicle had become distracted, and did not see the warning devices and signs. This investigation is ongoing.

Do you regularly train your workers on the hazards of working around traffic?
Do your workers wear high visibility clothing?
Do you flag facing traffic?
Do your Flaggers stand behind the fog line, off of the road?
Can you remote flag?
Can your Flaggers stand behind a barrier?

2/26/00 Crushed
A 25-year-old worker was killed when he was pulled into a piece of machinery at a bottling company. The victim was a worker for a temporary service, but had been assigned to this bottling company for about a year.
The equipment is a called a depalletizer. Its function is to take a layer of bottles off a pallet through the use of suction cups on the end of a mechanical arm (rake), and place the bottles onto the production line. The victim was caught by this rake arm of suction cups, and pulled on to the top of the pallet. The suction cups pressed down on the worker and against the pallet, suffocating him. The victim had been working on a part of the production line that was very noisy and was not easily visible to other workers. A coworker, who noticed that the machine was not working, discovered him. This investigation is ongoing.
Is your machinery properly safeguarded through the use of devices such as light curtains, interlock switches or barriers that prevent any part of the worker from entering the machine?
Do you regularly evaluate your production process to determine if hazards exist?
Do you have a lockout/tag out program?
Are your workers trained in this program?
Are your workers trained in the use of the equipment? Is refresher training provided?
Do you rotate your workers to other machines within the shift to prevent fatigue?

2/7/00 Electrocuted
A 29-year-old, married, father of one, was killed; and a 27-year old co-worker seriously injured when they came into contact with 72kv power line. Both victims were construction workers on a commercial building project. The worker that was killed had been employed with the company for three years, and his co-worker for two months. The victims were working on the roof structure of the building taking measurements. The power pole was 20 feet from the building, but the lines carrying 72kv of power ran at an angle that brought them closer to the roof. One victim was in a scissors lift holding one end of a steel tape measure, while the other victim was on the roof of the building holding the other end. The victim in the lift was in the process of raising the platform when it came into contact with the power line. He was killed instantly. The electricity traveled along the tape measurer he was holding to the co-worker on the roof. The co-worker was seriously burned, knocked off the roof, and fell approximately 20 feet to the ground.
In the last few years, the employer had been inspected several times by the Department, and found to have an excellent record of safety. This employer had a policy in their accident prevention plan that addressed the hazard of working around power lines. The worker that was killed had recently received training on the equipment. The employer was using a fall protection system on the roof where the accident occurred. The investigation is ongoing.
Do you conduct a hazard evaluation BEFORE starting the job?
Do you have policy for working around power lines as part of your accident prevention plan?

Do you enforce this policy?
Are all workers trained to keep a minimum of 10 feet between themselves and high voltage power lines?
Do you have a fall protection work plan?
Is it adequate for the type of work that's being done?Are all of your workers who may occasionally use lifting equipment, trained in its use?
Does this training include working around overhead hazards such as power lines?

1/5/00 Crushed
A 42-year-old father of four was killed while operating a spring winding machine. The victim was an operator of a machine used to fabricate springs to be used on garage doors. He had been doing this job for approximately two months.
The victim connected a metal rod to a collar that was attached to a rotating shaft. The shaft turns, wraps the metal rod around the shaft, until the required number of bends for the springs are made. The collar moves along the shaft as it bends the rod. It was this collar that caught the victim's clothing, pulling the 6-foot, 200-pound person into the machine, and through a 14-inch opening. This is the second time this employee had been caught by the collar.In an inspection some years earlier, the Department had cited the employer for not safeguarding the rotating shafts and collar on this piece of equipment. The employer complied by placing a fixed guard over the shaft, and collar to protect their workers from the hazard. During the fatality investigation, the machine was found to have had this fixed guard removed. This investigation is ongoing.
Have you conducted a hazard assessment of all your equipment to determine if it is appropriately safeguarded?
Do you conduct regular inspections of the equipment to insure that machine guards or safeguarding devices are in place and operational?
Have your employees been trained in the safe use of equipment they use?
Are your employees trained to report unsafe conditions?
Are you aware of consultation services available through the Department of Labor and Industries?

12/28/99 Struck by tree
A 57-year-old timber cutter was struck by a decayed stem, which fell from a hemlock school marm (a tree stem that branches into two or more tops). The victim had worked on and off for this employer for many years. The cutter had been given an overview of the employers APP prior to starting the job. The victim was considered fully trained with over 30 plus years of timber felling experience.
It is assumed that the victim tried to fall an approx. 80-foot tall fir with an approximately an 18-inch butt towards the northeast. Witnesses indicated that a smaller tree was hung up into a larger tree up hill from the leaner. This lean would have been towards the N-NE. It was to the right of the employer's active log landing. Witnesses indicated that both trees went down at the same time.
The shovel operator was watching the cutter. He indicated the cutter was watching the two trees fall. The operator stated that he saw the chunk come out from the tree above uphill from the faller a short time after the falling trees hit the ground. He indicated the faller did not look up or seem to be concerned of a hazard in the area. The tree that the chunk came from was seen to sway then the chunk came out and fell onto the cutter. The choker setter in the brush indicated he saw two trees fall, and then saw a chunk come out of a tree and strike the cutter. The cutter did not seem to be aware of the falling chunk or notice the hazard in the area.

Identify trees with dead tops. Fall trees into the open whenever possible. Create and use an escape path when falling timber. Be aware of overhead hazards. After brushing another tree, check for widow makers (something hung up on the top of a tree). Be aware that ground vibration or brushing other trees is enough to topple unstable snags or dead tops.

12/22/99 Fall From Elevation

A 49-year-old construction worker was killed as a result of a fall from a roof. Two crews, one working for the general contractor and the other for a subcontractor, were working on a low pitch, metal roof on a commercial building. The victim was part of the subcontractor's seven-person crew.The crew working for the general contractor cut an opening for the elevator. The opening had been cut, but the metal had not yet been removed. The metal was supported by a single beam, and held in place by a couple of screws. This crew had not informed the roofing crew that the hole had been cut. The cutout had not been protected by barricade or a person stationed as monitor. The general contractor did not have a fall protection work plan.

The subcontractor had a fall protection work plan utilizing the safety monitor system. The victim was walking to another portion of the roof when he stepped onto the cut section of the roof, which gave way. The victim dropped through the hole falling 25 feet.

Do you alert your subcontractors to hazards or unusual conditions on the work site?

Have you assessed the job site for possible hidden hazards?

Have you provided safeguarding of open holes or cutouts (monitors or barricades) on the walking surface?

Do you have a fall protection work plan and are all your employees trained?

Do you ensure your subcontractors have their own fall protection work plan?

11/16/99 Drowned

Two workers, a 71-year-old laborer, and a 39-year-old mechanic, died as a result of a well drilling accident. The two victims were part of a crew drilling well water in a field on a remote section of a farm.

The workers' used a bulldozer to dig a 50 x 80-foot retention pond 8 feet deep, to catch the tailings from the drilling. The pond was sloped at each end, however, it was vertical on the sides. The tailings were a mixture of water, dirt, and soap like material used in the drilling process. The process created large quantities of foam. It was the laborers' job to spray a liquid on the foam to prevent damage to the equipment.Part of the crew had already left the work site. The mechanic still on duty, radioed to see if the laborers had returned with them. The reply was that they had not. The mechanic called for assistance. When persons arrived 45 minutes later, they found the two bodies in the pond.

The laborer had been working near the edge of the retention pond where the walls were vertical. The foam from the drilling obscured the edge of the pond, and he fell in. The mechanic had gone in after him, as a result, both men drowned.

Do you clearly mark the edge of your retention ponds?

Are all sides of your excavation sloped?

Do you have an emergency rescue plan?

Do your workers know what to do in the event of an emergency?

Do you have a method to account for all of your workers?

10/3/99 Run Over

A 39-year-old, father of five was killed when he was run over by a dump truck. The victim was a truck driver with 12 years of experience, and had been with his employer for approximately 2 ½ years.

There were two single-bed dump trucks and a front-end loader on site. The loader operator filled the back of one of the trucks and told the victim that he could leave and observed the victim getting into the cab of the truck. The second driver observed the victim getting into his truck, checking his lift-hand mirror, then was seen in the right-hand mirror while slowly backing up, so he could keep track of the front-end loader. His back-up alarms were working.
The loader operator rotated his loader so he could scoop material to put in the second driver's truck after positioned. He was rotating the loader back to dump, and saw the victim out of his truck, behind Drivers #2's truck. Before the loader operator could respond, Driver #2 truck struck the victim, knocking him down, and pinning him under the wheels of the truck. Emergency medical assistance was called, however, the victim was pronounced dead at the scene.Are your workers trained to work around traffic on a construction site?
Are your workers frequently reminded of site hazards in safety meetings?
Is all of your equipment inspected regularly to insure the back up alarm work?

9/16/99 Run Over
The foreman on a street paving crew was fatally injured when he was struck by a dump truck.
The 34-year-old father of three had just taken a can of spray paint from the truck cab and walked to the front of the dump truck. The victim bent over to paint something on the new asphalt. The driver of the truck left the cab to shake off excess material from the tailgate. The driver returned to the cab, started to pull foreword, striking the victim with the bumper. The victim fell into the path of the dual axle and was crushed. He was airlifted to the hospital where he later expired
Do your employees wear high visibility clothing while working around moving vehicles?
Do your workers make sure that they are visible to traffic?

8/23/99 Vehicle Rollover/Crushed
A 16-year-old tractor operator was killed when his tractor rolled into a ditch.
The victim was the only part time employee, working a summer job, for a local farmer. The operator was driving the tractor, towing a hay baler, along a county road. He moved to the right side of the road to allow traffic to pass. The tractor's wheels hit a patch of gravel, causing the tires to slip, and the operator lost control. The tractor tires went into a ditch causing the vehicle to roll over. A witness stated that the operator attempted to jump from the vehicle, but was crushed when the tractor rolled on top of him.Have your workers been trained in the safe operation of the vehicles they're assigned to drive?Do you assess your workers skills before assigning them to operate equipment?
Do you vehicles have roll over protection (ROPS)?
Do you require the use of operator restraints (seatbelts)?

8/12/99 Crushed
Doors crushed a manufacturer's employee.The victim was attempting to pull a door out from a stack of doors. The stack started to shift, and the worker attempted to hold the stack upright. The worker was crushed when approximately seven doors weighing 700 pounds toppled down on him.
Do you provide lifting equipment?
Are your employees trained in safe material handling procedures?
Are all materials secured in stable racks or on pallets?

8/6/99 Fall from Elevation

A 37-year-old residential roofer was fatally injured after falling from a roof.
The victim, and one coworker, had climbed onto a roof of a business. Both carried their fall protection equipment with them. but neither had put it on. They were sitting on the roof waiting for their supervisor to arrive, when the victim moved to the edge of the roof to tie down a lose tarp. While at the edge, the roof gave way, and the worker fell 14 feet to the loading dock.
Do you supply and require the wearing of fall protection?
Do you have a fall protection work plan?
Do you conduct a hazard assessment of the work area before work begins?

7/26/99 Crushed
A sawmill filer was caught between hydraulic rollers.
The 40-year-old, mother of three, was a master filer who had been changing saw blades on a chipper saw. The victim was caught and crushed by the rollers. The victim had worked in the wood products industry for over 20 years, but was new to this company. This was the first time the worker had changed the blades alone. The victim thought that the equipment had been locked out, and coworkers in the area were unaware the victim was working in the area and reactivated the machine. When the victim entered the machine to perform maintenance, the laser eye that activates the equipment was crossed, causing the chipper heads to close, crushing the worker.
Do you have an energy control (Lockout/Tagout) program?
Are all authorized users trained and equipped with the appropriate Lockout/Tagout equipment?
Are all affected workers aware of and trained in the Lockout/Tagout program?
Do you enforce its use? Do you perform an annual review of your program?

7/15/99 Crushed
A 31-year-old, married, log truck driver was killed when a log struck him.
The driver was removing wrappers off a truck, when a log rolled off and struck the operator. The driver had received a particle load, and was preparing to move the load. The load was not secured prior to removing the wrappers. When the wrappers were removed, the log rolled killing the worker.
Do your workers know to ensure the load they are handling is secured before removing restraints?
Are your workers trained on the proper method to load and unload their trucks?

6/30/99 Motor vehicle accident
A 28-year-old, father of three, was killed while driving a concrete pumper truck.
Witnesses at the driver's last stop stated that the operator had difficulty setting the brakes, however, eventually got them to work, and proceeded to the next delivery. The truck was on a downhill grade when the brakes failed, causing the operator lose control. The truck went through an intersection with a stop sign, down an embankment, and became airborne. The driver died of a head injury.Do you have a regular mechanical inspection and maintenance plan for all your vehicles?
Do your drivers know what to do when they suspect a mechanical problem on their vehicle?
Do you assess your workers skills before assigning them to operate equipment?
Do you require the use of seatbelts?

6/10/99 Crushed

A 55-year old, crane operator, was killed when the bridge crane he was operating collapsed and crushed him.
The victim was operating the crane in a large manufacturing facility when the crane collapsed, dropping the cab he was in 60 feet to the ground.
Do you regularly inspect your equipment for damage or wear?
Have your workers had an assessment of there operating skills?
Do you ensure your operators lift within the capacity of the equipment?

5/28/99 Run over
A 31-year-old, moving company, worker was killed when a moving van ran over him.
The worker parked his 1972 box moving van on a 10% grade and set the parking brake. The operator did not check the tires. The parking brake failed to hold the vehicle, and the moving van started to roll. The worker attempted to enter the cab to stop the vehicle, was struck, and run over by the van.
Do you have a regular mechanical inspection and maintenance plan for all your vehicles?
Do you supply and require your drivers to chock their wheels?

11/13/98 Crushed
A maintenance worker was crushed to death inside a trash compactor.
It is unknown why he was inside the compactor, as he was scheduled to fill a hydraulic fluid reservoir on the outside of the compactor. No lockout or tag-out systems had been activated before he entered the compactor. The company had a plan for locking out machinery before maintenance was performed and provided update training to employees this past August.
How is it assured that all employees will follow the lockout procedures on which they have been trained?
Are employees able to identify all forms of stored energy?

11/10/98 Thrown and crushed
21 year-old, skidder operator, was attempting to straighten the skidder on a 57% slope, and rolled 362 feet down the mountainside.
The skidder was equipped with a cage, however, no seatbelt was provided. When the skidder stopped, the victim was found partially out of the cage. A girlfriend and baby survive him.
Do all vehicles you operate have seat belts?
Are seat belts required?
If required, are they used?
If you work in remote areas, what are your emergency notification systems?
In remote areas, would you be able to give adequate directions to rescue personnel so they are able to locate you and your co-workers?

10/8/98 Inhalation of Chemicals
A high-pressure six-inch diameter line in a chemical process industry burst, releasing over fifteen tons of toxic gas into the atmosphere.
Four workers, located near the ruptured pipe, inhaled silicon tetrachloride and trichlorosilane gases resulting in hospitalization. Sixteen days after the incident one worker died, and a second died approximately five weeks later. The ruptured pipe had worn thin internally.
Does your plant need to apply the Process Safety Standard for Highly Hazardous Chemicals?

If so, have all design specifications been met and the appropriate checks and inspections been informed to assure the integrity of piping and delivery systems?
Has an emergency action plan been developed?

9/10/98 Struck in Head
A 29-years old, truck driver, was killed when one piece of plastic pipe rolled off a truck bed, and struck him in the head. pipe was 50 feet long, 1-5/8" thick, and weighed approximately 5000 pounds. The victim had removed all but one strap securing the load, moved the truck, and was in the process of removing the remaining strap. The load shifted, rolling the pipe off the truck, and onto the victim. A lift truck was not in position to stop the rolling pipe.
Has your company instituted adequate unloading procedures?
Are loads properly blocked?
If lift trucks are used as part of the procedure, are they always in place to protect the worker in the event that a load shifts?

9/1/98 Electrocution
A 21-year old man was electrocuted when his hand slipped and touched high voltage while testing the fluorescent lights on a Ferris wheel.
The victim received proper training, proper tools, and had successfully wired and tested six previous lights. A wife and 6-month old baby survive him.
When working with electricity, have you fully investigated, understand and are able to perform a successful lock out of the electrical energy?
If installing electrical parts, lights or any machine with electrical power, have you read and understood the manufacturer's installation instructions?Have you had sufficient training to understand the hazards you will be exposed to, for example, have you been trained on both Alternating Current (AC) and Direct Current (DC) if you are working with both types?

8/24/98 Fall/Head Injury
A fall from 25 feet kills construction worker.
The worker had been spraying foam, used to seal the insulation material attached to the trusses of the structure, when the sheet of insulation he was walking on broke. The victim attempted to grab an I- beam, however, failed and fell to the ground landing on his head and shoulder. The victim died several hours later. No fall protection devices were in place.
How often have you continued doing a procedure the same way you've always done it even though you have learned it is not the safest way?What well-established work practices in your company have been reviewed with an eye towards increased safety?

8/19/98 Electrocution
A 27-year-old, painting foreman, was killed when the aluminum extension ladder came into contact with a high voltage system of 13,200 volts.
He leaves a pregnant wife and a 3-year-old daughter.
If performing maintenance or painting activities around high voltage, do you maintain a 10-foot distance from the high voltage line?
Do you plan for the possibility of tools or equipment that may fall, sway or blow into the 10-foot area?

8/17/98 Fall

A 15-year-old youth was killed, and 27-year old coworker seriously injured, from a fall off of a 4-story building.
The two men were part of a window washing crew. The older man was suspended in a boatswain's chair cleaning windows when the carriage of the chair came off the roof. The youth fell over the parapet, and landed 40 feet below.If your company employs persons under the age of 18, does the company comply with Washington laws that spell out which jobs are prohibited for minor workers?
When performing work that requires the use of scaffolding, is the correct type of scaffolding being used and is a competent person assigned to oversee the operation?
Have workers been trained to recognize specific hazards associated with setting up and performing work on scaffolds?

8/5/98 Fall
A 22-year-old roofer fell approximately 22 feet off the edge of a roof onto concrete and died.
The worker leaned over the side of the roof in an attempt to nail a piece of felt that was flapping. He placed his hand onto the felt, which had no support underneath, then fell over the roof. He was wearing a fall restraint harness and was dragging the ropes behind him, however, was not connected to the anchorage point. His brother witnessed the fall.
If you are performing jobs that require the use of fall arrest or restraint, under what situations have you allowed the protection not to be used?
Is it when "the job will only take a minute", or when "it has been done before without the belts and we didn't fall then?"

8/4/98 Crushed
At 2:15 p.m. a victim was apparently spreading crushed rock in a 7 feet deep by 53 inches wide trench.
The victim was working 20 feet outside of the trench box. The near vertical east wall of the trench failed, and covered the victim with soil. The weight of the soil crushed the victim.
Do you have trench rescue procedures including emergency rescue equipment and a plan to assure the safety of anyone involved in rescue?
Has safe egress from excavations been assured by ladders or other means?
Are your work procedures set up to encourage workers to stay inside the trench box?

7/27/98 Multiple injuries from fall
A 21-year-old, construction worker, was killed when a bobcat loader operating on loose soil rolled backwards over a 70-foot cliff into a rocky ravine.
The driver restraint was by-passed or not operating, and no seat belt was worn. The rollover bars on the bobcat were intact after the fall. The victim was thrown out of the bobcat. Rescue efforts were hampered when no one could pass down the cliff; to drive around on the road.
Who in your company is responsible for checking that safety devices are installed and used on all equipment, including rental equipment?
If you work in remote areas, how will you summon help in the event of an emergency?

7/16/98 Fall/Head
A 53-year old worker was standing in the front-end bucket of the tractor removing 20-foot aluminum bulkheads from a potato shed.

Each bulkhead weighed 75 to 85 pounds. The worker had already removed three bulkheads and had them pinned against one side of the bucket with his legs. As he was removing a fourth bulkhead, it slipped, knocking him backwards and out of the bucket. The four bulkheads followed the victim to the ground, and all four of them hit him on the head. The victim was a foreman, and had worked at the same employer for 16 years.
Are there work practices that could be chosen that will be a safer alternative?
In your company is everyone acknowledged as having a say in safety procedures, even if it means speaking against the procedures of a superior?

7/9/98 Crushed
The victim and his coworker attached slings of cedar to a drop line of a helicopter. The pilot was signaled to lift the load. As the load left the ground, the spliced eye of the sling attached to the drop line hook on the helicopter pulled out. The workers had traveled into the flight path on the way to the next sling to be hooked. When the sling dropped, it crushed the victim. A wife and daughter survive him.
When moving materials of any kind, are procedures enforced that will maintain a safety zone?
Are riggings inspected regularly?

6/8/98 Impact injury to chest
A 51-year-old, truck driver, was killed when the semi-truck he was driving swerved in to the median and overturned.
The driver was unrestrained, and apparently died from a blunt impact injury to the chest.
Does your company require safe driving practices?
Have employees been trained on these practices?

5/3/98 Burns
A 28-year-old, insulation installer, was killed when a LPG tank ruptured and ignited. The victim was working in a basket suspended from a boom, unloading insulation onto a catwalk. While in the process of repositioning his boom truck, the front wheel made contact with the LPG line causing it to crack. Static electricity touched off the gas, engulfing one worker and injuring another.
If your company hires independent contractors to perform work on your site, are they informed of the potential hazards they might contact?
Do you have a program to assure that first aid assistance is available in the workplace?

4/29/98 Fall from vehicle
At approximately 3:30 p.m., the supervisor of a towing company decided to straddle a motorcycle that was on the flatbed of a tow truck.
He was trying to assist by holding the bike upright on the trip back to the tow yard approximately a mile away. As the driver of the tow truck slowly negotiated a left-hand turn, the centrifugal force tipped the bike to the right, pinning the victim under the bike. In the effort to struggle free, the victim fell over the side of the moving tow truck, and was run over by the rear wheel. The victim was conscious for some moments after the incident, however expired on 5/6/98. He leaves a wife and one child.
How do you transport materials in your business?
How is the load secured to prevent slippage or falling?
Are workers allowed to ride in or on vehicles without being secured in a conventional vehicle seat?

4/20/98 A Fall from elevation

A construction worker was killed when he fell 14 feet from a roof while installing metal roofing materials.
The victim was not wearing fall protection equipment. The employer had been cited several times for not having a fall protection work plan, and not having his workers tied off. The employer was cited willful.
Do you plan for fall protection? If so, at what height?
Do you use fall arrest or fall restraint?
How does your company handle notification of unsafe work practices?
Are all notifications followed up on and corrected?
Do you cut corners on safety because "we've always done it this way?"

4/14/98 Motor Vehicle Accident
At approximately 10:00 p.m., a janitorial supervisor, performing regular responsibilities, was killed instantaneously when her car crossed the centerline and hit an oncoming car in a head-on collision.
The driver of the oncoming car suffered a broken leg and arm. Contributing factors to the fatality include a blood alcohol level of 0.26, excessive speed, and failure to wear a seat belt. The recommended speed limit of the corner where the fatality occurred was 25 mph. The deceased's vehicle was estimated at entering the corner traveling 74-80 mph.If you require employees to operate motor vehicles as part of their duties, what policies do you have in place to ensure safety?
Does this policy ensure that all employees have a driver's license, are operating a vehicle in good driving condition, and obey speed limit laws?How do you address safety in jobs where delivery timeliness is part of customer expectation or guarantee, such as pizza delivery?
Does your policy address the reporting of suspicious behavior potentially attributed to alcohol or drugs?

4/13/98 Fall from ladder
A 62-year-old worker was killed when he fell 15 feet from a ladder.
Workers at the coffee shop, where he was installing a garage door opener, found him lying on the ground. He died of massive trauma to the head. The victim had just started working for the company part-time to supplement his retirement. No citations were issued.
Do you have safe work procedures for the use of ladders?
Do you do routine inspection of ladders?
Do you erect ladders at the appropriate pitch, assuring secure footing?
Do you know how to safely use ladders near electrical circuits?

4/10/98 Struck by tree
A 44-year-old, married, father of two, was killed when a tree being cut fell the wrong direction, crushing him.
The victim and two other tree fallers were working too closely together. The company was cited for their cutting practices.
If you are a logger, do you know your work areas?
Do you maintain a 2-tree length distance from other fallers?

4/2/98 Crushed
A 26-year-old, married, father of four, was killed when he was struck and pulled under the tracks of a log loader.

The operator of the loader was attempting to back the machine, and did not see the worker bent down, adjusting his equipment. No audible warning device was used, and the driver did not do a visual check. By the time the victim realized the machine was moving, he was pulled under the treads and crushed.
Do you work with any equipment that would benefit from backup alarms, even though they may not be required?
If backup alarms are required, are they functioning?

3/19/98 Fall
A 24-year-old, married, father of three, and foreman of a farm crew, died due to head injuries sustained in a fall from a mechanical hay de-stacker.
The victim's crew was working the 6 p.m. to 2 a.m. shift when at 1:45 a.m. on the last load of the night, the de-stacker jammed at the top of the machine. The victim had the operator stop the machine while he cleared the jam. He shouted to the operator to re-start the machine, and was pinned by the swing arm of the de-stacker. As three members of his crew struggled to free him from the swing arm, he was thrown from the machine, and fell 11 feet to a concrete floor where he suffered fatal head injuries.Does your company have a plan to address the lock out of a machine while servicing so that unexpected energy or stored energy does not hurt someone when the machine is restarted?
Has any thought been given to addressing the alertness of workers during late or rotating work shifts?

3/17/98 Crushed
At 1:15 p.m., two tractor-trailer units parked at a dairy farm were preparing to leave. The vehicles had been parked with rear ends facing. Both drivers closed their doors, and proceeded to the cabs. The victim returned to the rear of his truck. Meanwhile, the second driver backed up in order to make a turn, and pinned the victim between the two trucks.
Does your work plan allow for effective communication between workers and for the safe placement of machinery?
Do you have equipment or procedures that would benefit from audible backup warning devices?

2/14/98 Struck
A 43-year-old man was killed when a 1"x6"x10 foot piece of lumber was thrown from a trim saw.
The victim was performing his regular job, 45 feet away from the saw, when the lumber was ejected from the saw and struck the man in the chest. The employer was cited for no effective guarding.
Do you know if all your machines properly guarded?
Are the guards put back in place after routine and emergency maintenance and before work starts again?
How many times have you allowed work to be performed with unguarded machines "while a new guard is being ordered" and "because our deadline is coming up?"